# Highlights

## Overview

This issue of the *Natural Gas Monthly* contains estimates of natural gas data through May 2000 for many data series at the national level. Estimates of natural gas prices are available through February 2000 for most series. Also, State-level data are available through December 1999. The special report, "Natural Gas 1999: A Preliminary Summary," provides an analysis of these preliminary data for 1999. Final 1999 data will be published in EIA's *Natural Gas Annual 1999* in the fall of 2000.

Highlights of the most recent data estimates contained in this issue are:

Cumulatively through May 2000, total natural gas supplies increased as net imports were 4 percent higher and net withdrawals from underground storage were 33 percent higher compared with the same period in 1999. At the same time, dry production levels remained virtually unchanged.

After 2 months of the 2000 refill season, the level of working gas in underground storage of 1,450 billion cubic feet at the end of May is much lower than in May 1999 (1,847 billion cubic feet) and May 1998 (1,774 billion cubic feet).

From January through May 2000, average daily end-use consumption of natural gas was 61.3 billion cubic feet per day, nearly the same as the daily rate for the same period in 1999. Declines in the residential and commercial sectors were offset by increases in the industrial sector.

Natural gas wellhead prices averaged $2.21 per thousand cubic feet for the first two months of 2000, substantially above levels of the previous 2 years.

## Supply

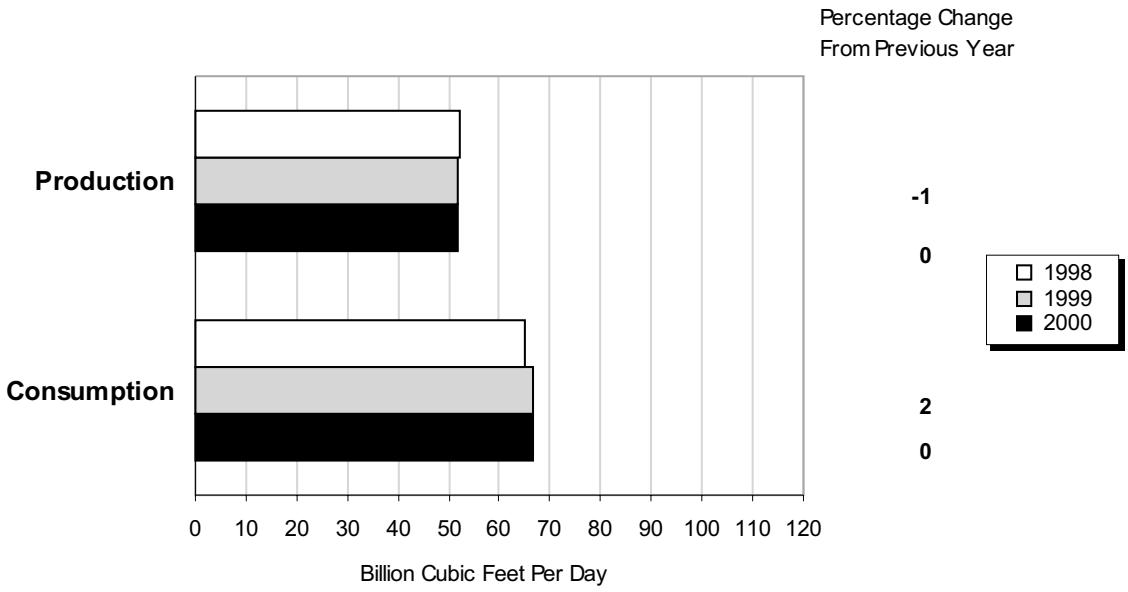
Cumulative dry natural gas production through May 2000 was virtually equal to that of the same period in 1999 and 1998 (less than 1 percent differences). However, total natural gas supplies increased as net imports and net withdrawals from underground storage rose compared with levels of the same period in 1999. Cumulatively through May 2000, dry natural gas production is estimated to be 7,855 billion cubic feet, almost the same volume as in 1999. Dry gas production for May 2000 is estimated to be 1,603 billion cubic feet or 51.7 billion cubic feet per day, about 1 percent higher than the 1,588 billion cubic feet produced in May 1999. (Table 1 and Figure HI1)

Cumulative net imports for the first 5 months of 2000 are estimated to be 1,425 billion cubic feet, 4 percent higher than for the same period of 1999 (Table 2). Net imports for May 2000 are estimated to be 280 billion cubic feet, 3 percent higher than in May 1999 and 16 percent higher than in May 1998 (Table 2). Total imports rose this year as production from the Sable Island gas fields off Nova Scotia began flowing into the Northeast and imports of liquefied natural gas (LNG) shipments increased, primarily from Trinidad. The United States began importing LNG from Trinidad in May 1999 (Table 5). Data for imports by country of origin are available through March 2000. Cumulative LNG shipments from Trinidad during the first quarter of 2000 totaled 27 billion cubic feet.

The amount of working gas in underground storage facilities at the end of May 2000 is estimated to be 1,450 billion cubic feet (Table 10). This working gas level, after 2 months of the 2000 refill season, is much lower than the high levels seen in May 1999 (1,847 billion cubic feet) and May 1998 (1,774 billion cubic feet). However, it remained above the low levels seen in 1997 and 1996.

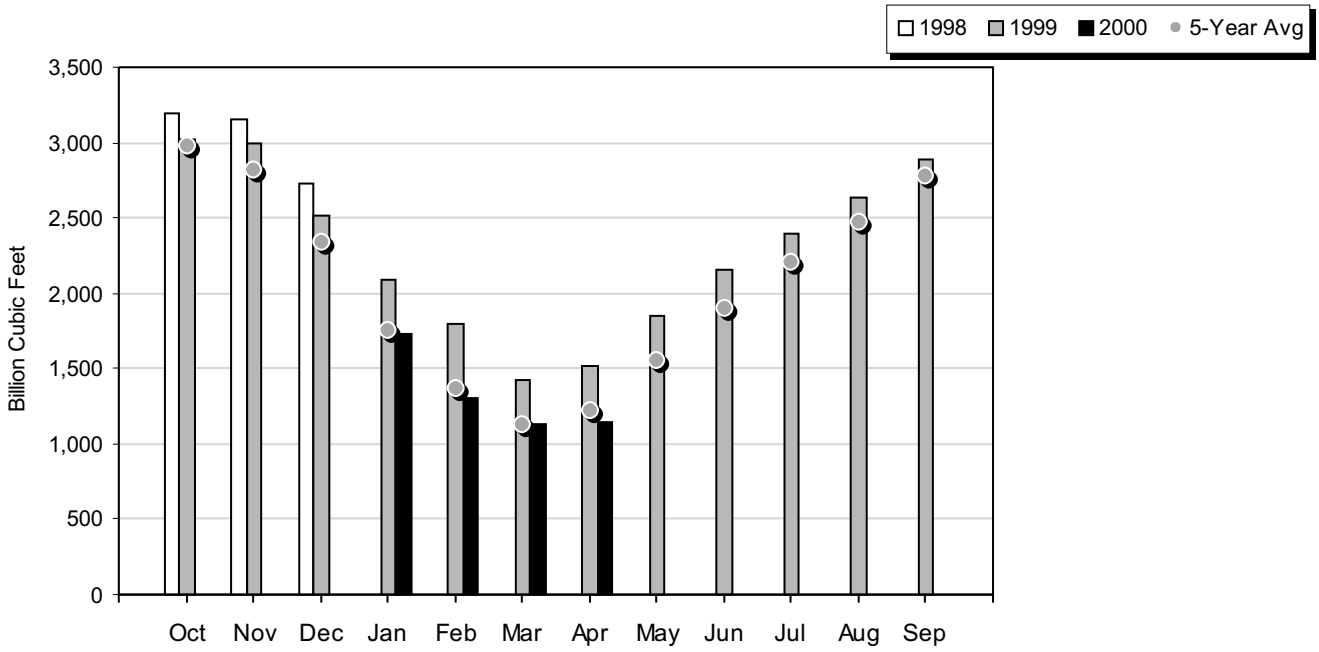
Net injections of natural gas into storage are estimated to be 255 billion cubic feet in May 2000, 82 billion cubic feet less than in May 1999 and 136 billion cubic feet or 35 percent less than in May 1998. This year's low level for net injections is due partially to

**Figure HI1. Average Daily Rate of Natural Gas Production and Consumption, January-May, 1998-2000**




**Source:** Table 2.

**Figure HI2. Working Gas in Underground Storage in the United States, 1998-2000**




**Note:** The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1995 to 1999 while the January average is calculated from January levels for 1996 to 2000. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

**Source:** Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

increased demand for electric generation for air conditioning resulting from high temperatures in both the Southwest and Northeast during May 2000. The recent unprecedented high prices for spot gas continue to be a hindrance to a more normal refill rate for this time of year.[1] With spot gas trading at higher prices than during recent winters, the incentive to keep or add gas to storage has been limited, at least in the first 2 months of this refill season.

## End-Use Consumption

Cumulatively for January through May 2000, end-use consumption of natural gas is estimated to be 9,312 billion cubic feet or 61.3 billion cubic feet per day, nearly the same as the daily rate for the first 5 months of 1999 (Table 3). Declines in the residential and commercial sectors were somewhat offset by an increase in the industrial sector.

The residential and commercial sectors are highly responsive to weather-related space-heating requirements. Although there were cold periods during January and February of this year in some areas of the country, generally the winter months (January through March) were warmer than normal and warmer than the first quarter of 1999. Cumulative residential consumption during January through May 2000 is estimated to be 2,817 billion cubic feet or 18.5 billion cubic feet per day, 3 percent lower than the daily rate for the same period in 1999. Consumption also declined in the commercial sector by 3 percent. Cumulative commercial consumption from January through May is estimated to be 10.9 billion cubic feet per day, compared with a daily rate of 11.2 billion cubic feet through May 1999.

The daily rate of industrial consumption of natural gas was 24.8 billion cubic feet for January through May 2000 compared with 23.9 billion cubic feet per day during the first 5 months of 1999, an increase of 4 percent. The increase in industrial consumption may reflect an increase in gas used by nonutility generators. As the restructuring of the electric utility industry proceeds, generating plants that are sold to entities that are not regulated utilities report gas consumption as nonutility generation rather than electric utility consumption. (See the special report, "Natural Gas 1999: A Preliminary Summary," in this issue of the *Natural Gas Monthly* for further discussion of the reporting of gas consumption for electricity generation.)

Data for the electric utility sector are available only through February 2000. Cumulative consumption in this sector climbed to 356 billion cubic feet, 8 percent above the consumption level during the same period of 1999. This increase occurred despite an increase in the natural gas wellhead price.

## Prices

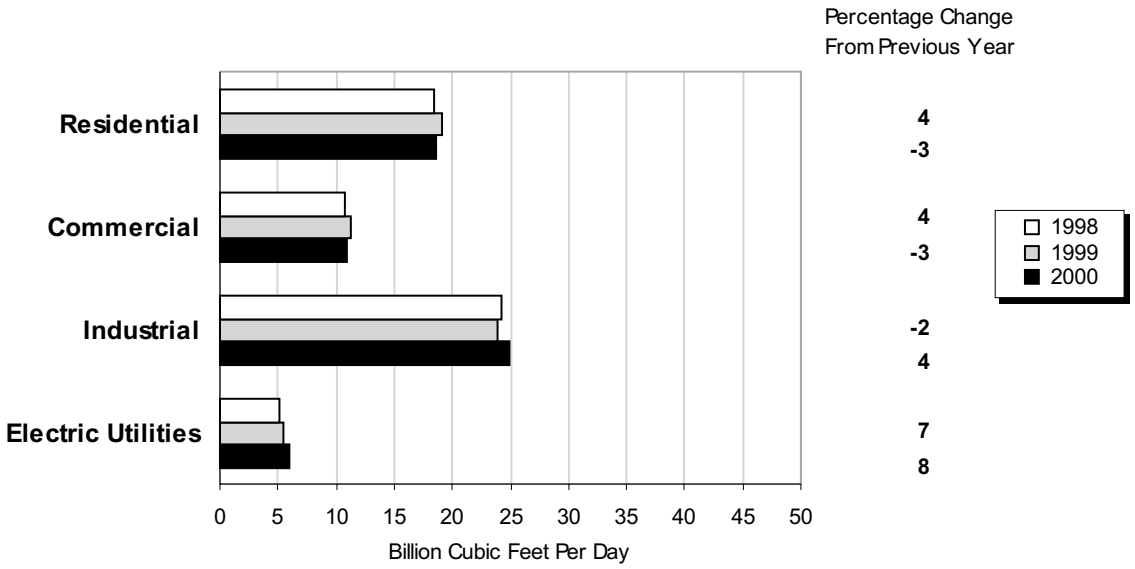
Natural gas wellhead prices in early 2000 are substantially above the levels of the previous 2 years. The cumulative average price for January and February 2000 is $2.21 per thousand cubic feet, 25 percent higher than in 1999 and 13 percent higher than in 1998 (Table 4 and Figure HI4). The estimated average wellhead price for February 2000 is $2.30 per thousand cubic feet, 8 percent higher than in January 2000. One must go back to 1997 to find higher wellhead prices during the first 2 months of the year. In January 1997, the wellhead price was at its highest point for the year at $3.40 per thousand cubic feet. The price then fell sharply to $1.79 per thousand cubic feet by March 1997. More recent data from the spot and futures markets indicate that the average wellhead price has continued to increase during the first several months of 2000.

Both daily futures settlement prices and daily average spot prices at the Henry Hub have increased steadily since early February 2000 (Figure HI5). Both the near-month futures and spot prices were trading above $3.00 per million Btu during last week of April 2000. The futures contract for May delivery closed on April 26, 2000, at $3.089 per MMBtu, and the ramping up of prices continued in May as both spot and futures market prices exceeded $4.00 per million Btu. On May 26, 2000, the futures contract for June delivery at the Henry Hub closed at $4.408 per million Btu. This is one of the highest prices for a futures contract since natural gas began trading on the New York Mercantile Exchange in 1991. A number of factors are contributing to the sharp increase in natural gas prices. Some of these include the demand for gas for electricity generation and the relatively high price of oil and refined petroleum products.

1 Energy Information Administration, *Natural Gas Weekly Market Update*. http://www.eia.doe.gov (May 30, 2000).

All natural gas prices[2] paid by end users are higher in early 2000 than in early 1999, but most are below the level of early 1998. Cumulatively for January through February 2000, residential and commercial users paid an estimated $6.37 and $5.34 per thousand cubic feet for natural gas, respectively. Both average prices are 4 percent higher than for the same period in 1999. The residential average is 1 percent below that of 1998 and the commercial average is 5 percent below that of 1998. In the industrial sector, the cumulative average price paid for natural gas for January through February 2000 is estimated to be $3.34 per thousand cubic feet, 11 percent higher than in 1999, but 8 percent lower than in 1998.

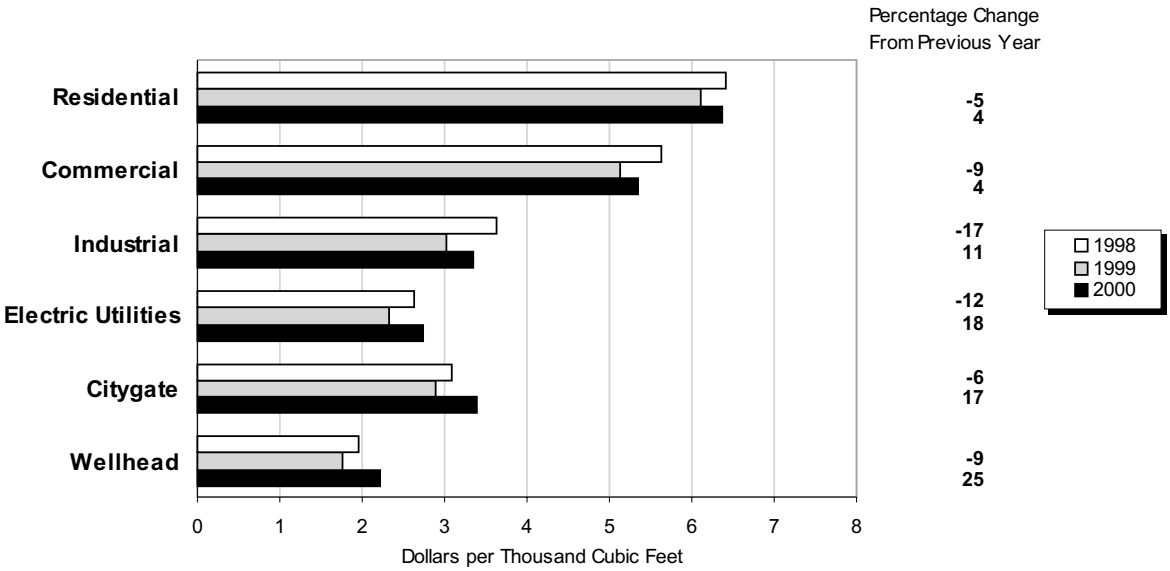
**Figure HI3. Average Daily Rate of Natural Gas Deliveries to Consumers, January-May, 1998-2000**




**Note:** Electric utilities reflect deliveries for January-February.
**Source:** Table 3.

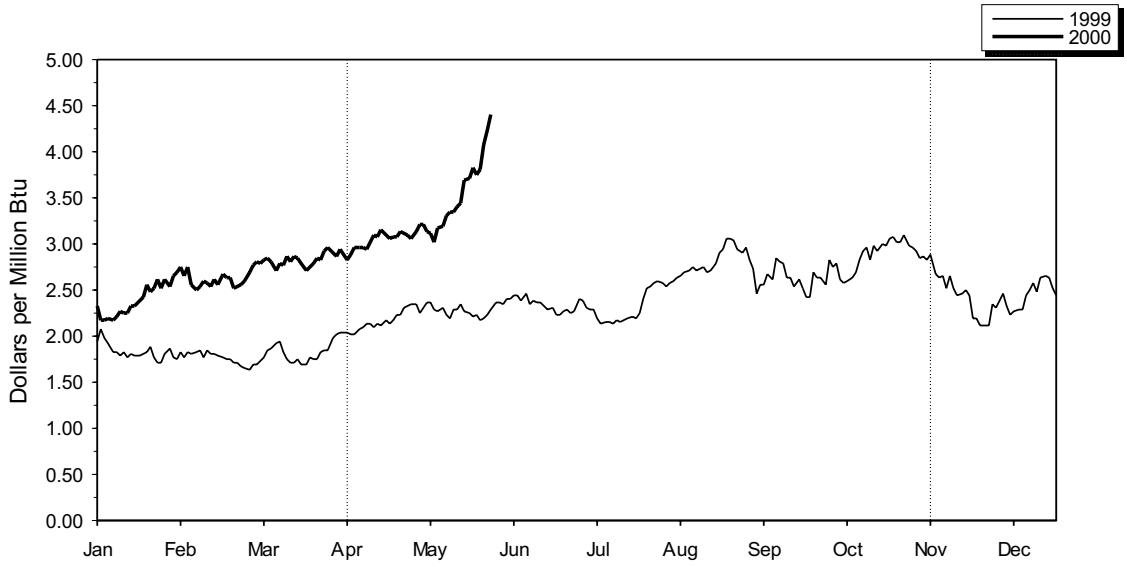
2 In the electric utility sector, an estimate for the price paid for natural gas is only available for January 2000, and it is higher than in both January 1999 and 1998. The January 2000 estimate is $2.74 per thousand cubic feet, 18 percent higher than in 1999 and 4 percent above the 1998 level.

**Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-February, 1998-2000**




**Note:** Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices.
**Source:** Table 4.

**Figure HI5. Daily Futures Settlement Prices at the Henry Hub**




**Note:** The futures price is for the near-month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.
**Source:** Commodity Futures Trading Commission, Division of Economic Analysis.